

# Metals and their Compounds

## Lecture 5.2

Transition metals (Fig 23.24 p 918 BLB)

The first row Transition metals

<i>name</i>	<i>symbol</i>	<i>e.c.</i>	<i>oxidation states</i>
Scandium	Sc	$d^3$	<b>+3</b>
Titanium	Ti	$d^4$	<b>+3 +4</b>
Vanadium	V	$d^5$	<b>+2 +3 +4 +5</b>
Chromium	Cr	$d^6$	<b>+2 +3 +6</b>
Manganese	Mn	$d^7$	<b>+2 +3 +4 +6 +7</b>
Iron	Fe	$d^8$	<b>+2 +3 +6</b>
Cobalt	Co	$d^9$	<b>+2 +3</b>
Nickel	Ni	$d^{10}$	<b>+2 +3</b>
Copper	Cu	$d^{10}s^1$	<b>+1 +2 +3</b>